ABSTRACT OF THE DISCLOSURE

Disclosed is a transmission apparatus so adapted that extended-cells of variable-length cell can be handled. To accomplish this, the apparatus includes a receiver for receiving a frame signal from a transmission path; a demultiplexing/demapping unit for demultiplexing and demapping extended-cells from a payload of the frame signal received from the transmission path; a cell synchronizer for executing cell synchronization processing to identify a boundary 10 of an extended-cell; a controller for subjecting an extended-cell to switching and other control; a multiplexing/mapping unit for multiplexing and mapping an extended-cell, which is output from the controller, onto a payload of a frame signal; and a transmitter for 15 transmitting this frame signal to a transmission path.